

RECEIVED  
CENTRAL FAX CENTER  
JUL 21 2009

IN THE CLAIMS:

Claim 1 (currently amended): A food preserving method comprising the steps of:  
housing a conductive food tray (2) in a cooling box (1);  
placing a food (9) on the food tray (2); [[and]]  
cooling and storing the food (9) with an AC voltage and a DC voltage being simultaneously applied to the food tray (2), and wherein  
the DC voltage is a negative voltage; and  
when the voltage is applied to the food (9), electrons in dissolved oxygen of the food (9) are stabilized prior to a chemical reaction thereof and water molecules in the food (9) attract one another, so that water molecules cluster becomes smaller to be aligned to a sequence that holds the electrons in dissolved oxygen.

Claim 2 (currently amended): The food preserving method according to claim 1, wherein after a DC-AC simultaneous application period during which the AC voltage and the DC voltage are simultaneously applied, the food (9) is cooled and stored with only one of the DC voltage and the AC voltage being applied to the food tray (2).

Claim 3 (currently amended): The food preserving method according to any one of claims 1 and 2, wherein the cooling box (1) ~~functions as~~ is a freezer for freezing and storing the food (9).

Claim 4 (currently amended): The food preserving method according to any one of claims 1 and 2, wherein the cooling box (1) ~~functions as~~ is a refrigerator for refrigerating and storing the food (9).

Claim 5 (withdrawn): A food preserving device comprising:  
a cooling box (1);  
a conductive food tray (2) housed in the cooling box (1);  
an AC power supply (3) used for applying an AC voltage to the food tray (2);  
and

a DC power supply (4) used for applying a DC voltage to the food tray (2),  
wherein

a control means for applying the AC voltage and the DC voltage are  
simultaneously applied to the food tray (2) for a predetermined time period; and  
and then applying one of the AC voltage or the negative DC voltage to the  
food tray for another predetermined time period  
the DC voltage is a negative voltage.

Claim 6 (withdrawn): The food preserving device according to claim 5, further  
comprising a control unit (5) that controls a voltage application to the food tray (2) by the AC  
power supply (3) and the DC power supply (4).

Claim 7 (withdrawn): The food preserving device according to any one of claims 5  
and 6, wherein after a DC-AC simultaneous application period during which the AC voltage  
and the DC voltage are simultaneously applied, only one of the DC voltage and the AC  
voltage is applied to the food tray (2) by the control unit (5).

Claim 8 (withdrawn): The food preserving device according to any one of claims 5  
and 6, wherein the cooling box (1) functions as a freezer for freezing the food (9).

Claim 9 (withdrawn): The food preserving device according to claim 7, wherein the  
cooling box (1) functions as a freezer for freezing the food (9).

Claim 10 (withdrawn): The food preserving device according to any one of claims 5  
and 6, wherein the cooling box (1) functions as a refrigerator for refrigerating the food (9).

Claim 11 (withdrawn): The food preserving device according to claim 7, wherein the  
cooling box (1) functions as a refrigerator for refrigerating the food (9).

Claim 12 (new): A food preserving method comprising the steps of:  
housing a conductive food tray (2) in a cooling box (1);  
placing a food (9) on the food tray (2); and  
cooling the food (9) with an AC voltage and a DC voltage being simultaneously and continuously applied to the food tray (2), and wherein  
the DC voltage is a negative voltage; and  
the food (9) is frozen and stored with a pH value thereof set high and with an entrance of a channel, which serves as a path through which exchanges of ions and water of molecules of the food (9) is conducted, closed.

Claim 13 (new): The food preserving method according to claim 1, wherein a magnitude of the negative DC voltage is equal to or larger than a magnitude of the AC voltage when the AC voltage and the negative DC voltage are simultaneously applied.

Claim 14 (new): A food preserving method comprising the steps of:  
housing a conductive food tray (2) in a cooling box (1);  
placing a food (9) on the food tray (2);  
cooling the food (9) with an AC voltage and a negative DC voltage being simultaneously applied to the food tray (2) for a predetermined time period; and  
continuing to cool the food while applying one of the AC voltage or the negative DC voltage to the food for another predetermined period of time.

Claim 15 (new): A food preserving method comprising the steps of:  
housing a conductive food tray (2) in a cooling box (1);  
placing a food (9) on the food tray (2); and  
cooling the food (9) comprising first cooling, second cooling, and third cooling, wherein  
in the first cooling, an AC voltage and a negative DC voltage are simultaneously applied to the food tray (2),  
in the second cooling, an AC voltage and a negative DC voltage are simultaneously applied to the food tray (2), and

in the third cooling, no voltage is applied to the food tray (2); and  
wherein

at the beginning of the third cooling, the temperature is -20°C.

Claim 16 (new): A food preserving method comprising the steps of:

housing a conductive food tray (2) in a cooling box (1);

placing a food (9) on the food tray (2); and

cooling the food (9) comprising first cooling, second cooling, and third  
cooling, wherein

in the first cooling, an AC voltage and a negative DC voltage are  
simultaneously applied to the food tray (2),

in the second cooling, an AC voltage or a negative DC voltage is  
simultaneously applied to the food tray (2), and

in the third cooling, no voltage is applied to the food tray (2); and  
wherein

at the beginning of the third cooling, the temperature is -20°C.